

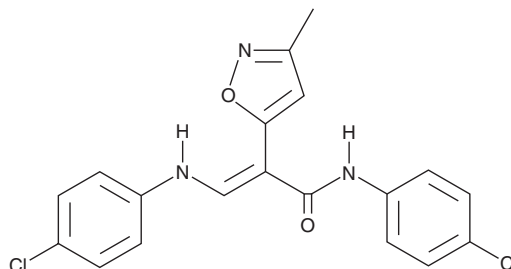
# PRODUCT INFORMATION



## CCMI

Item No. 37571

**CAS Registry No.:** 917837-54-8  
**Formal Name:** N-(4-chlorophenyl)- $\alpha$ -[[[(4-chlorophenyl)amino]methylene]-3-methyl-5-isoxazoleacetamide  
**Synonyms:** AVL-3288, XY-4083  
**MF:** C<sub>19</sub>H<sub>15</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 388.3  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

CCMI is supplied as a solid. A stock solution may be made by dissolving the CCMI in the solvent of choice, which should be purged with an inert gas. CCMI is soluble in DMSO.

### Description

CCMI is a positive allosteric modulator (PAM) of  $\alpha 7$  nicotinic acetylcholine receptors (nAChRs).<sup>1</sup> It enhances ACh-, nicotine-, or choline-induced currents in *Xenopus* oocytes expressing recombinant human  $\alpha 7$  nAChRs (EC<sub>50</sub>s = 0.7, 0.6, and 0.5  $\mu$ M, respectively). *In vivo*, CCMI (0.3 and 1 mg/kg, i.v.) improves sensory gating deficits in a paired auditory stimulus paradigm in mice. It decreases the latency to find the platform in the Morris water maze test in a rat model of traumatic brain injury (TBI) induced by parasagittal fluid-percussion.<sup>2</sup>

### References

1. Ng, H.J., Whittemore, E.R., Tran, M.B., *et al.* Nootropic  $\alpha 7$  nicotinic receptor allosteric modulator derived from GABA<sub>A</sub> receptor modulators. *Proc. Natl. Acad. Sci. USA* **104(19)**, 8058-8064 (2007).
2. Titus, D.J., Johnstone, T., Johnson, N.H., *et al.* Positive allosteric modulation of the  $\alpha 7$  nicotinic acetylcholine receptor as a treatment for cognitive deficits after traumatic brain injury. *PLoS One* **14(10)**, e0223180 (2019).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM